Amendments to the Claims:

1.   (Currently Amended) A vacuum pump, comprising

a pump unit [[(14)]] with a <u>vacuum</u> pumping set [[(16)]], ~~and~~

an operating unit [[(12)]] ~~being~~ connected with the pump unit [[(14)]] for controlling it and arranged spaced from the pump unit [[(14)]], <u>and</u>

5   ~~c h a r a c t e r i z e d i n~~

~~that the pump unit~~ [[(14)]] ~~and the operating unit~~ [[(12)]] ~~respectively comprise a~~ transceiver module<u>s</u> [[(20,22)]] <u>in the pump unit and the operating unit, respectively,</u> for transmitting and receiving control and operational data bidirectionally in a wireless manner, the pump unit [[(14)]] and the operating unit

10   [[(12)]] being exclusively connected with each other in a wireless manner.

2.   (Currently Amended)   The vacuum pump of claim 1, ~~characterized in that~~ <u>wherein</u> the pump unit [[(14)]] comprises<u>:</u>

a pump control [[(40)]] and a supervisory module [[(42)]] for continuous supervision of the transceiver module [[(20)]], the pump control [[(40)]]

5   switching the pumping set [[(16)]] to a safety mode when the supervisory module [[(42)]] signals an interruption of the reception of a control signal continuously transmitted by the transceiver module [[(22)]] of the operating unit [[(12)]].

3.   (Currently Amended)   The vacuum pump of claim 2, ~~characterized in that~~ <u>wherein</u> the operating unit [[(12)]] comprises<u>:</u>

a supervisory module [[(44)]] continuously supervising the reception of the transceiver module [[(22)]] and continuously inducing the transmission of the

5   control signal to the pump unit [[(14)]] when a fault-free reception is detected.

4.   (Currently Amended)   The vacuum pump of ~~one of claims~~ <u>claim</u>1 [[- 3]], ~~characterized in that~~ <u>wherein</u> the transceiver modules [[(20,22)]] ~~are~~ <u>include</u> radio modules via which a radio link between the pump unit [[(14)]] and the operating unit [[(12)]] ~~exists~~ <u>is established</u>.

5.   (Currently Amended)   The vacuum pump of one of claims claim 1 [[- 3]], characterized in that wherein the transceiver modules are infrared modules via which an infrared link between the pump unit [[(14)]] and the operating unit [[(12)]] exists is established.

6.   (Currently Amended)   The vacuum pump of one of claims claim 1 [[- 5]], characterized in that wherein at least one of the pump unit [[(14)]] or and the operating unit [[(12)]] comprises includes a wireless telephone module [[(34)]].

7.   (Currently Amended)   The vacuum pump of one of claims claim 1 [[- 4]], characterized in that wherein at least one of the pump unit [[(14)]] or and the operating unit [[(12)]] comprises includes a position determination module [[(26)]].

8.   (Currently Amended)   A method for controlling a vacuum pump [[(10)]] comprising a pump unit [[(14)]] with a pumping set [[(16)]] and an operating unit [[(12)]] arranged spaced from the pump unit [[(14)]], the pump unit [[(14)]] and the operating unit [[(12)]] being connected with each other bidirectionally and exclusively in a wireless manner, with the method comprising the steps of:

[[-]]continuously transmitting signals from the pump unit [[(14)]] to the operating unit [[(12)]] and vice versa,

[[-]]continuously supervising the reception of the operating unit signals in the pump unit [[(14)]] and of the pump unit signals in the operating unit [[(12)]], and

[[-]]operating the pumping set [[(16)]] in a safety mode when an interruption of the continuous reception in at least one of the pump unit [[(14)]] and/or in and the operating unit [[(12)]] is detected.

9.   (Currently Amended The method of claim 8, ~~characterized by the method steps of~~ <u>further including:</u>

[[-]]continuously transmitting a control signal from the operating unit [[(12)]] to the pump unit [[(14)]] as long as a fault-free reception in the operating unit [[(12)]] is detected,

[[-]]continuously supervising the reception of the control signal in the pump unit [[(14)]], and

[[-]]operating the pumping set [[(16)]] in a safety mode when no control signal is received.

10.   (New) A vacuum pump system which performs the method of claim 8.

11.   (New) A vacuum pump system comprising:

a central operating unit including:

a control unit for controlling a plurality of vacuum pumping units,

a manual input system through which instructions are entered into the control module,

a display, and

a transceiver module which sends wireless control signals to each of a plurality of vacuum pumping units and receives wireless information signals therefrom;

at least one vacuum pumping unit including:

a vacuum pump,

an electronic vacuum pump control module for controlling operation of the vacuum pump,

a transceiver module for receiving the control signals from the central control unit and for sending the information signals wirelessly from the vacuum pump control module to the central control unit.

12. (New) The vacuum pumping system of claim 11, further including:

a supervisory module connected with the control module of at least one of the central control unit control module and the vacuum pump control module for causing the vacuum pump to enter a safety mode in response to an interruption in communications between the central control unit and the vacuum pumping unit.

13. (New) The vacuum pumping system of claim 11, wherein the central control unit further includes:

a telephone module for sending maintenance and control data from the central operating unit to a maintenance center.

14. (New) The vacuum pumping system of claim 13, wherein the telephone module operates under one of a GSM, HDCSD, GPRS, or UMTS standard and the central control unit and vacuum pumping unit transceiver modules operate according to one of a Blue Tooth and a wireless LAN IEEE 802.11 standard.

15. (New) The vacuum pumping system of claim 11, wherein the vacuum pumping unit further includes:

a GPS module which determines a location of the vacuum pumping unit, the GPS module being connected with the vacuum pump control module for communicating vacuum pumping unit position information to the central control unit.